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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,731	07/07/2003	Zhang-Mu Xu		7288

7590 04/03/2007  
ZHANG-MU XU  
Apt. 3B  
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NEW YORK, NY 10002

EXAMINER

PATEL, SHEFALI D

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/613,731

Applicant(s)

XU, ZHANG-MU

Examiner

Shefali D. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. There are multiple copies of Figure 1 and Figure 2. The examiner will consider the one with the numerical labels (the one that are submitted with all Figures on different sheet (4 sheets)).
2. The drawings are objected to because the box elements in Figures 1, 2 and 3 (box 1, 8, 12, 14 etc.) need to be labeled in accordance with 37 C.F.R. § 1.83(a) as stated *infra*. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specifically, 37 C.F.R. § 1.83(a) states that "the drawing in a nonprovisional application must show every feature of the invention specified in the claims. However, conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box)."

### *Specification*

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally **limited to a single paragraph on a separate sheet within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because at bottom of page 2 there is a mention of the "[DRAWING]:" and the description of Fig. 1 and Fig. 2 thereof. Correction is required. See MPEP § 608.01(b).

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The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

5. The disclosure is objected to because of the following informalities: what does the title of the section "THE INVENTION OF THIS INVENTION" on page 2 of the specification mean? Appropriate correction is required.

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are **suggested** for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

7. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains **no new matter**.

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8. On page 9 line 9 there recited is an element "the storage bell (18)", however, in claim 20 applicant refers this as a "cell" as well as in the specification on page 7 line 15. Please be consistent with the terminology; is it "bell" or "cell"?

***Claim Rejections - 35 USC § 112***

9. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be replete with grammatical and idiomatic errors.

11. Claims 1-20 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure, which goes to make up the device, must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited. The recitation of "(according to claim...wherein said)" does not necessary ~~does~~ require parenthesis. The device that suppose to help (or aid) in avoiding accidents in the surgical operation is not claimed and therefore indefinite.

***Claim Objections***

12. Claims 4 and 20 are objected to because of the following informalities: Claim 4 is not a complete claim. The last line of which recites, "...way according to claim 1 wherein said ." This is not a complete sentence. Appropriate correction is required. Claim 20 is rejected for the same reasons.

***Claim Rejections - 35 USC § 101***

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-3 do not fall within any one of the statutory categories: Useful, Concrete, Tangible Result.

Also, These claim recites Non-Functional Descriptive Material.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claims 1-3 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 1-3 recites an "invention...a new idea and the new way..." which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such intention to help doctor avoid accidents from happening, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se. There is an "intention" to this invention. However, is it really performing the action (i.e., avoid accident, etc.) claimed? If so, what is being done to perform that action?

Dependent claims 4-20 are rejected for the same reasons.

#### ***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-5, 8 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lane (US 5,127,394).

With regard to **claim 1** Lane discloses the claimed invention to help doctor to avoid the accident happen in the surgical operation (preventing accidental overdose of radiation, col. 1 lines 11-16 and also see the abstract).

With regard to **claim 2** Lane discloses the claimed invention to protect patient from accident injury in the surgical operation (injury from the overdose radiation, col. 1 lines 11-17).

With regard to **claim 3** Lane discloses the claimed invention for the purpose to let patient know which inward organs of his or her body has been cut in the surgical operation (by displaying the procedure on a monitor, the patient is informed about the organ(s) being analyzed or being worked on by the physician, col. 3 lines 18-20).

With regard to **claim 4** Lane discloses the claimed invention to look for various related methods and making various new appliances and new products, which are used for completed new idea and the new way (various methods, appliances and the product includes both endoscopy and fluoroscopy, col. 3 lines 12-37).

With regard to **claim 5** Lane discloses new use of the electronic image storage device, which consists of a lens of video camera (lens of a video camera 36, col. 3 lines 32-33), video cassette recorder (video cassette recorder 17, col. 3 lines 19, 65-66) and television through a cable (monitor 18 that is connected to the TV camera 36, col. 3 lines 57-66).

With regard to **claim 8** Lane discloses a new use of the lens of video camera to observe the surgical operate process, which the doctor does to patient (to record the physician's activities and display on the monitor, col. 3 lines 31-34).

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With regard to **claim 11** Lane discloses new use of the various video cassette recorder to observe the surgical operate process, which the doctor does to patient, and to record it (col. 3 lines 31-34 and lines 60-66).

With regard to **claim 12** Lane discloses new use of the various video cassette tape (video cassette recorder 17 as seen in Figures 1 and 2 and also at col. 3 lines 16-20).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 6, 13-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane (US 5,127,394) in view of Seppi (US 7,078,699).

With regard to **claim 6** Lane discloses various related methods and making various new appliances and new products, which are used for completed new idea and the new way as disclosed above in claim 4, lens of video camera, the monitor through a cable as disclosed above in claim 5 and the arguments are not repeated herein, but are incorporated by reference. Lane does not expressly disclose computer with CD recorder. Seppi discloses computer with a CD recorder at col. 4 lines 55-60. Lane and Seppi are combinable because they are from the same field of endeavor, i.e., medical imaging. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Seppi with Lane. The motivation for doing so is to store data in the memory unit that is external device such as a CDROM as suggested by Seppi. Therefore, it would have been obvious to combine Seppi with Lane to obtain the invention as specified in claim 6.

With regard to **claim 13** Seppi discloses new use of various CD-recorder (such as DVD) at col. 4 lines 55-60.



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With regard to **claim 14** Seppi discloses new use of the CD-disk at col. 4 lines 55-60.

With regard to **claim 15** Seppi discloses new use of the other various CD-disk (DVD – Digital Video Disk – for example at col. 4 line 60).

With regard to **claim 16** Seppi discloses new use of various CD-disk (such as DVD) at col. 4 lines 60.

With regard to **claim 19** Lane discloses a new use of the various kinds of monitor (the monitor 18 is both valid for endoscope and fluoroscope, col. 8 lines 31-37).

18. Claims 7, 9-10 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane (US 5,127,394) in view of Nunokawa (US 4,712,894).

With regard to **claim 7** Lane discloses various related methods and making various new appliances and new products, which are used for completed new idea and the new way as disclosed above in claim 4, lens of video camera as disclosed above in claim 5 and the arguments are not repeated herein, but are incorporated by reference. Lane does not expressly disclose video camera with infrared light emitted device and the television with the recorder. Nunokawa discloses video camera with infrared light emitted device that is connected to the television recorder through a cable at col. 2 lines 53-65 and col. 3 lines 3-13, col. 5 lines 11-20. Lane and Nunokawa are combinable because they are from the same field of endeavor, i.e., medical imaging (patient's eye in Nunokawa). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Nunokawa with Lane. The motivation for doing so is detect that the eye is properly positioned with respect to the objective lens means and only infrared rays to pass therethrough as suggested by Nunokawa. Therefore, it would have been obvious to combine Nunokawa with Lane to obtain the invention as specified in claim 7.

With regard to **claim 9** Nunokawa discloses a new use of the lens of video camera with infrared light emitted device (col. 2 lines 53-56).

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With regard to **claim 10** Lane discloses use of the other various kind of lens of video camera with any function at col. 3 lines 39-56 and col. 8 lines 37-42.

With regard to **claim 17** Nunokawa discloses use of the various kinds of television with any function at col. 2 line 54, col. 5 lines 15-21.

With regard to **claim 18** Nunokawa discloses use of the various kinds of television with any function at col. 2 line 54, col. 5 lines 15-21.

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lane (US 5,127,394) in view of Cosens et al. (US 4,034,762) (hereinafter, "Cosens").

With regard to **claim 20** Lane discloses various related methods and making various new appliances and new products, which are used for completed new idea and the new way as disclosed above in claim 4, and the arguments are not repeated herein, but are incorporated by reference. Lane does not expressly disclose the electric circuit. Cosens discloses the electric circuit (Figure 5) contained by the switch (switches 68, 86, 140, etc., col. 7 lines 57-58), lamps (87, 90, etc., LED at col. 8 lines 42-55), sounders (speaker 97, col. 8 line 65), cell (battery 85 for example at col. 8 lines 36-44), and the cable (cable 62 at col. 7 lines 53-55). Lane and Cosens are combinable because they are from the same field of endeavor, i.e., medical imaging (living tissue in a surgical procedure in Cosens). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Cosens with Lane. The motivation for doing so is to seal (correct any mistake) the lumen of a vas or other tubular vessel, for example, as suggested by Cosens at col. 1 lines 6-17. Therefore, it would have been obvious to combine Cosens with Lane to obtain the invention as specified in claim 20.

#### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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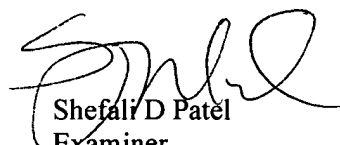
US 6,267,599 – System for producing highly realistic simulated operating condition for interactive training of person to perform minimally invasive surgical procedures

JP 2002247450 – X-ray Television Receiver

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D. Patel whose telephone number is 571-272-7396. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Shefali D Patel  
Examiner  
Art Unit 2624

sdp